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The impact of corporate governance on corporate performance: Evidence from Japan [☆]

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Abstract

Employing a unique data set provided by Governance Metrics International, which rates firms using six different corporate governance dimensions, we analyze whether Japanese firms with many governance provisions have a better corporate performance than firms with few governance provisions. Employing an overall index, we find that well-governed firms significantly outperform poorly governed firms by up to 15% a year. Using indices for various governance categories, we find that not all categories affect corporate performance. Governance provisions that deal with financial disclosure, shareholder rights, and remuneration do affect stock price performance. The impact of provisions that deal with board accountability, market for control, and corporate behavior is limited.

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1. Introduction

In the past few years, numerous Japanese firms have voluntarily broken with one or more of Japan's well-established corporate traditions. A prime example is Sony, whose company board announced the appointment of Sir Howard Stringer on March 7, 2005. This type of event indicates a possible prelude to a more fundamental change in Japan's traditional system of corporate governance. For decades, the Japanese system has been distinctly different from its Western counterpart: That is, corporate governance was mainly self-conducted and characterized by large inter-corporate shareholdings and the deep involvement of a main bank. With the ongoing integration of financial markets and the rise in foreign ownership, Western-like governance features may become more and more important for Japanese firms. Indeed, some facets of the newly proposed code of corporate governance under consideration by the Japanese government are in line with those already practiced in many Western countries. In this article, we investigate whether Japanese firms with better Western-like governance features have a better stock price performance.

In the past decade, empirical research has shown significant relationships between various corporate governance features and corporate performance. Until recently, however, the majority of researchers have focused on specific features of corporate governance, which makes it difficult to establish an overall relationship between corporate governance and corporate performance. According to [Boehren and Oedegaard \(2003\)](#), relating corporate performance to a particular aspect of corporate governance may not capture the true relationship unless that specific aspect is controlled for other aspects of governance. This argument inspired several researchers to construct a single governance index, which is a scorecard that measures a firm's corporate governance over several dimensions. For example, governance indices have been constructed for Europe and the United Kingdom ([Bauer et al., 2004](#)), Germany ([Drobetz et al., 2004](#)), Russia ([Black, 2001](#)), Korea ([Black et al., 2006](#)), the United States ([Gompers et al., 2003](#)), and several emerging markets ([Klapper and Love, 2004](#)). These indices are used to determine the relationship between a firm's overall corporate governance score and its corporate performance. In most cases, these studies find positive and significant relationships. For Japan, many studies have focused on specific aspects of corporate governance and their relationships to corporate performance¹; however, no study has integrated the various aspects of corporate governance into a single index.

In this article, we examine the relationship between corporate governance and stock price performance in Japan. We use a unique data set provided by Governance Metrics International (GMI), which provides several indices for corporate governance. GMI uses approximately 500 different corporate governance criteria to capture a broad range of internationally accepted governance characteristics. These characteristics are grouped into six governance categories/indices, which are then combined to produce a single overall index. Using the overall governance index, we find that Japanese firms with a high rating significantly outperform Japanese firms with a low rating by up to 15.12% a year. These results are robust over different sample periods and for different portfolio constructions.

[Bebchuk et al. \(2004\)](#) argue that not all corporate governance features matter to all firms. They show, for example, that only practices associated with shareholder rights and takeover defenses affect the performance of U.S. firms. Given the conspicuously different corporate governance system in Japan, we expect a different set of governance practices to affect the performance of Japanese firms. The different categories that are distinguished in the GMI data set are board

¹ See, for example, [Kang and Shivdasani \(1995\)](#), [Kaplan and Minton \(1994\)](#), [Kato and Kubo \(2006\)](#), and [Morck et al. \(2000\)](#).

Table 1
Global governance ratings per country

Country	Rating	Country	Rating
USA	7.23	Sweden	5.42
Canada	7.19	Italy	5.41
UK	7.12	Singapore	5.32
Australia	6.73	Norway	5.23
Netherlands	6.58	Austria	5.04
Finland	6.05	France	4.94
Ireland	6.04	Hong Kong	4.63
Switzerland	5.66	Denmark	4.60
New Zealand	5.62	Portugal	4.55
Germany	5.58	Belgium	4.52
Spain	5.46	Japan	3.57
		Greece	2.93

This table presents the average global overall rating for all countries evaluated by GMI. Average ratings are computed for the August 2004 evaluation. All firms (financials and non-financials) are included.

accountability, financial disclosure and internal controls, shareholder rights, remuneration, market for control, and corporate behavior. We find that for Japan, remuneration and financial disclosure and internal controls practices are the most relevant for stock price performance. In addition, the shareholder rights category has some impact on stock price performance. The remaining categories have little or no impact on stock price performance.

The remainder of this article is structured as follows: Section 2 introduces and discusses the governance data provided by GMI; Section 3 presents the performance regressions for the global GMI index; Section 4 presents the results for the various governance categories and their relationship to stock returns; and Section 5 offers some conclusions.

2. Data

GMI produces governance ratings for thousands of firms internationally. In particular, the ratings consider all stocks included in the main indices of the North American, European, and Asia-Pacific markets. For Japan, GMI rates the stocks included in the Nikkei 225 and various other stocks. In constructing their indices, GMI rates firms according to approximately 500 different governance criteria, which are combined into six categories, as mentioned in the introduction. For each category, ratings are established on a 10-point scale with half point increments. A best-rated company in a particular category is awarded a 10; a worst-rated company is given a 1. Ratings within each category are computed both globally and locally. Firms assessed in a global category are compared to all firms in the GMI universe. Firms assessed in a local category are compared to all firms in that country.² The ratings for each category are combined to produce weighted average overall ratings: one global overall rating and one home overall rating.

For Japan, GMI constructed ratings for 225 companies in June 2003 and January 2004 and 356 companies in August 2004. As a result of this large increase in the number of firms evaluated in August 2004 and because the GMI ratings are relative (i.e., the inclusion or deletion of firms affects the rating of all firms in the sample), we focus only on the last rating.³

² This construction of relative ratings contrasts the use of absolute ratings (e.g., Gompers et al., 2003).

³ As a robustness check, we also conduct our analysis on the January 2004 rating. These results are in line with the findings presented in this article and are, therefore, not reported.

To show the level of corporate governance in Japan relative to other countries, we provide the average global overall ratings for a number of countries as of August 2004 (see Table 1). On a global scale, Japan ranks second to last, and only Greece has a lower governance rating. This rating illustrates Japan's relatively low level of corporate governance when measured by international standards. It also provides a strong motivation for investigating whether firms with higher corporate governance ratings are valued higher by investors.

The aggregate level of a corporate governance score may be influenced by industry-wide features (see Bauer et al., 2004); therefore, we categorize the firms in the data into separate industries (industry classification are included in the GMI data set). In Table 2, we present ratings for each industry in Japan. As shown in Table 2, the Telecom sector has the highest overall rating, with an average of 4.50. There are, however, only three firms in this industry. Japanese banks have the lowest governance rating, with an average rating of 2.62. Given the diversity among sectors, sector effects may be an important feature to consider when explaining possible differences in corporate performance. Therefore, when analyzing the relationship between returns and corporate governance, it is important to correct for these effects (see Bauer et al., 2004; Bebchuk et al., 2004; Gompers et al., 2003).

In line with previous research (e.g., Hiraki et al., 2003), we only consider non-financial firms in the remainder of this study. Banks and other financial firms (e.g., financial services and insurance companies) are removed from the sample. The financial services sector also includes several trusts, which have distinctively different corporate governance structures than other firms. As a result of removing all financial firms, there are 315 firms in the present study's sample.

As discussed above, the overall corporate governance ratings are based on criteria that can be classified into six different categories: (1) board accountability, (2) financial disclosure and internal controls, (3) shareholder rights, (4) remuneration, (5) market for control, and (6) corporate behavior. (An overview of the criteria in each category is provided in Appendix A) In Table 3, we report cross-correlations between the ratings of the various categories. It has often been argued that firms with high ratings in one particular category are more likely to have high ratings in other categories. We find that the global and home market overall ratings are highly correlated, with a correlation coefficient of 0.87. Similar high correlations are found for the other categories when comparing home and global categories (i.e., the diagonal of the lower left quadrant), ranging between 0.70 (shareholder rights) to 0.94 (corporate behavior). In addition, all separate categories

Table 2
Corporate governance rating per industry sector

Sector	<i>N</i> obs	Global overall rating	Sector	<i>N</i> obs	Global overall rating
Automobiles	19	3.50	Healthcare	15	4.13
Banks	17	2.62	Industrial goods and services	81	3.55
Basic resources	12	3.79	Insurance	4	3.50
Chemicals	26	4.19	Media	6	3.40
Construction	20	3.45	Non-cyclical goods and services	12	3.96
Cyclical goods and services	34	3.72	Retail	24	3.38
Energy	5	2.90	Technology	26	3.92
Financial services	19	3.00	Telecommunications	3	4.50
Food and beverage	26	3.29	Utilities	7	3.79
			All sectors		3.57

This table reports the number of firms in each industry sector and the average global overall ratings for each industry sector. Averages are computed from the August 2004 evaluation.

Table 3
Cross-correlations of the various categories

	Global							Home						
	OR	BA	FD/IC	SR	Rem	MC	CB	OR	BA	FD/IC	SR	Rem	MC	CB
BA	0.55**													
FD/IC	0.69**	0.03												
SR	0.33**	0.10	0.11											
Rem	0.39**	0.21**	0.14*	0.12*										
MC	0.16**	−0.08	0.06	0.19**	−0.11*									
CB	0.55**	0.29**	0.12**	0.09	0.23**	0.00								
Home														
OR	0.87**	0.48**	0.55**	0.41**	0.38**	0.32**	0.50**							
BA	0.51**	0.88**	0.05	0.14**	0.23**	−0.10	0.27**	0.54**						
FD/IC	0.67**	0.08	0.91**	0.16**	0.15**	0.06	0.14*	0.61**	0.10					
SR	0.35**	0.14*	0.12*	0.70**	0.22**	0.10	0.19**	0.50**	0.16**	0.15**				
Rem	0.39**	0.25**	0.17**	0.17**	0.77**	−0.02	0.20**	0.45**	0.23**	0.16**	0.22**			
MC	0.16**	−0.00	0.08	0.13*	−0.12*	0.85**	0.03	0.34**	−0.03	0.07	0.04	−0.03		
CB	0.57**	0.31**	0.15**	0.12*	0.27**	0.00	0.94**	0.56**	0.30**	0.17**	0.22**	0.24**	0.03	

This table reports cross-correlations between all corporate governance categories. Correlations are computed for the August 2004 evaluation. The row and column labels are OR: Overall Rating; BA: Board Accountability; FD/IC: Financial Disclosure and Internal Controls; SR: Shareholder Rights; Rem: Remuneration; MC: Global Market for Control; and CB: Corporate Behavior. Numbers printed in italics indicate the correlations of the same category in home and global rating. An * indicates significance at the 5% level, ** indicates significance at the 1% level.

Table 4
Corporate governance ratings per industry sector

Global							Home							
Sectors	<i>N</i> obs	BA	FD/IC	SR	Rem	MC	CB	OR	BA	FD/IC	SR	Rem	MC	CB
Automobiles	19	3.66	3.87	3.39	4.71	4.03	7.61	5.63	5.97	6.05	6.74	6.97	5.16	7.58
Basic resources	12	3.67	4.50	3.67	4.25	4.88	6.58	6.63	5.96	7.08	6.96	6.71	7.83	6.42
Chemicals	25	3.88	4.48	3.68	4.46	4.68	7.38	7.00	6.64	7.10	7.04	6.42	6.78	7.28
Construction	20	3.90	3.93	3.20	4.25	4.80	6.45	6.20	6.55	6.20	5.95	6.48	7.28	6.23
Cyclical goods and services	34	4.16	4.06	3.54	4.47	4.75	6.63	6.47	6.82	6.41	6.71	6.57	7.09	6.76
Energy	5	3.90	3.80	3.70	4.20	3.80	5.50	5.20	7.00	5.50	6.90	6.30	5.30	4.90
Food and beverage	26	3.35	3.85	3.33	4.15	4.87	7.00	5.83	5.75	6.12	6.23	6.52	7.33	6.79
Healthcare	15	4.03	4.50	3.57	4.60	4.73	6.97	7.07	6.80	7.30	6.73	7.03	7.03	7.07
Industrial goods and services	81	3.70	4.01	3.62	4.15	4.81	6.69	6.39	6.16	6.41	6.90	6.49	7.43	6.60
Media	6	3.85	3.74	3.67	4.28	4.65	6.61	6.23	6.56	6.28	6.97	6.49	6.97	6.33
Non-cyclical goods and services	12	3.67	4.21	3.92	4.33	4.50	7.42	7.08	6.50	6.67	6.96	7.50	6.83	7.29
Retail	24	3.42	3.96	3.54	4.38	4.85	6.50	6.17	5.77	6.48	6.58	6.83	7.71	6.17
Technology	26	3.90	4.56	3.79	4.04	4.38	7.02	6.75	6.87	7.38	7.42	6.29	6.23	7.02
Telecommunications	3	3.00	5.50	4.67	4.17	4.83	7.17	7.83	5.50	8.17	9.50	6.67	6.17	7.00
Utilities	7	3.78	4.14	3.86	4.27	4.77	7.00	6.88	6.44	6.82	7.38	6.68	7.16	6.89
All sectors		3.74	4.13	3.58	4.27	4.68	6.84	6.38	6.32	6.57	6.77	6.56	7.03	6.73

This table reports average ratings for all categories per industry sector. Averages are computed for the August 2004 evaluation. The column labels are OR: Overall Rating; BA: Board Accountability; FD&IC: Financial Disclosure and Internal Control; SR: Shareholder Rights; Rem: Remuneration; MC: Global Market for Control; and CB: Corporate Behavior.

show high correlations with the global overall rating and the home overall rating. Other correlations, although significant in various cases, are generally much lower. This indicates that all categories address different and distinct aspects of corporate governance.

Finally, in Table 4, we present the different ratings for each industry. The results indicate that sector effects may be an important factor for determining the relationship between corporate performance and corporate governance.

3. Governance ratings and stock price performance

Before we investigate the performance of different firms, it is necessary to explain the approach we follow. We consider the GMI ratings conducted in August 2004 because the time span after this rating (at the time of writing) is too short to conduct any meaningful analysis; therefore, we follow Bauer et al. (2004) by extending the data set backwards, assuming that corporate governance ratings remain relatively stable over time. (Bauer et al., 2004 find a time series correlation of 0.8 between two consecutive ratings and conclude that this is a reasonable assumption.) Although we are aware that this approach introduces look-ahead and survivorship biases, this approach needs to be adhered to if any meaningful analysis is to be conducted.⁴ Therefore, monthly stock return data are collected from January 1999 to December 2004, which covers a total of 6 years or 72 month. These data are obtained from Datastream International.

⁴ Our robustness check of the earlier rankings for Japan confirms our conviction, providing some additional evidence that corporate governance ratings are fairly stable.

Table 5
Outperformance of top-bottom portfolios

Equally weighted				Equally weighted sector adjusted			
	1999–2004	2000–2004	2001–2004		1999–2004	2000–2004	2001–2004
50%	1.96%*** (4.61%)	2.38%*** (4.60%)	1.77%** (4.79%)	50%	1.94%*** (3.74%)	2.43%*** (3.55%)	2.51%*** (3.62%)
45%	2.20%*** (5.31%)	1.58%** (5.41%)	1.94%** (5.63%)	45%	2.29%*** (4.25%)	2.37%*** (4.22%)	3.01%*** (4.25%)
40%	2.77%*** (6.06%)	1.45%* (6.06%)	1.86%* (6.48%)	40%	2.75%*** (4.80%)	2.31%*** (4.69%)	3.02%*** (4.92%)
33%	3.48%*** (6.38%)	2.27%*** (6.31%)	2.82%*** (6.68%)	33%	3.41%*** (5.34%)	3.04%*** (5.14%)	3.89%*** (5.30%)
30%	2.62%*** (7.27%)	0.48% (6.97%)	1.35% (7.33%)	30%	2.50%*** (5.86%)	1.95%*** (5.50%)	2.83%*** (5.72%)
25%	2.50%** (8.12%)	0.21% (7.57%)	1.35% (7.93%)	25%	2.37%*** (6.90%)	1.42%* (6.26%)	2.77%*** (6.48%)
20%	4.25%*** (8.06%)	1.75%* (7.70%)	3.70%*** (7.88%)	20%	4.03%*** (6.67%)	3.81%*** (6.39%)	5.39%*** (6.63%)
15%	4.81%*** (9.40%)	2.85%** (8.91%)	3.83%*** (9.04%)	15%	4.32%*** (8.62%)	3.90%*** (8.11%)	4.88%*** (8.25%)
10%	4.47%*** (10.19%)	5.52%*** (9.78%)	5.30%*** (10.20%)	10%	3.82%*** (10.28%)	5.16%*** (9.75%)	5.44%*** (10.13%)
5%	6.44%*** (13.18%)	8.72%*** (13.54%)	6.14%*** (14.24%)	5%	4.64%*** (13.26%)	8.85%*** (13.32%)	5.84%*** (13.92%)

This table reports the (annualized) outperformance of a zero-investment strategy, taking a long position in firms with the highest overall corporate governance rating and a short position in firm with the lowest rating. As outperformance is sensitive to both the evaluation period and cut-off points for portfolios, we report results over various sample periods and for several cut-off points. Standard deviations of outperformance are reported in parentheses. Significance is indicated by *, **, and *** for the 10%, 5% and 1% level, respectively.

To measure performance, we create equally weighted portfolios based on the global overall rating. We construct a good governance portfolio that includes firms with the highest ratings and a bad governance portfolio that includes firms with the lowest ratings. These portfolios are constructed on the following bases: First, as any analysis of the performance of ranking-based portfolios is sensitive to the selected cut-off points (i.e., the percentage of firms in the good and bad categories), we start the analysis using several cut-off points (i.e., 50%, 45%, 40%, 33%, 30%, 25%, 20%, 15%, 10%, and 5%); second, the performance analysis may be sensitive to the sample period used, and therefore, we perform the analysis over various sample periods (i.e., 1999–2004, 2000–2004, and 2001–2004); and third, for all portfolios, we calculate performance with and without sector adjustments.⁵

In Table 5, we report average annual returns and their standard deviations (in parentheses) for a zero-investment strategy, (i.e., long in a portfolio of well-governed firms and short in a portfolio of poorly governed firms). Results are reported for several cut-off points and over different sample periods. The portfolios are constructed using the global overall rating.

For the equally weighted portfolios without sector adjustment (i.e., left columns), we find that well-governed firms significantly outperform poorly governed firms at all cut-off points and in all sample intervals. This outperformance increases when the portfolios are based on the more extreme stocks in the sample (i.e., when the cut-off percentages decrease). The highest outperformance is found for the 5% cut-off point for the sample from January 2000 to December 2004, yielding an outperformance of 8.72% a year.

As corporate governance practices may vary per industry, the performance of the good–bad portfolios may be driven by industry effects. We correct for these industry or sector effects by subtracting sector returns from the individual stock returns and add back the market return.⁶ We compute sector returns as the average return of all stocks in our sample belonging to a particular sector.

In the right columns of Table 5, we present the outperformance of portfolios constructed with sector corrections. The results are similar to those for portfolios without sector corrections. We find that well-governed firms significantly outperform poorly governed firms, which indicates that the observed outperformance is driven by corporate governance features and not by industry effects.

Because the outperformance of the good–bad portfolios is observed in all sample periods, we continue our analysis by focusing on the period 2000–2004.⁷ To determine whether well-governed firms outperform poorly governed firms in a comparable manner, we correct for differences in risk associated with this long-short strategy. In addition, outperformance may be driven by firm-specific characteristics. Besides market risk, firm size and book-to-market value

⁵ We also created value weighted portfolios and evaluated their performance. When constructing a portfolio of well-governed firms, however, we find that three large firms (i.e., Sony, Mitsubishi, and Seven-Eleven) are driving the returns of the good governance portfolios (at a 15% cut-off point these stocks account for about 35% of the return of the portfolio). These firms had poor performances in the latter part of the sample and have a large impact on the total return of the top portfolio. The idea of constructing portfolios is to diversify idiosyncratic firm features. However, this diversification is not achieved for the value weighted portfolios. Therefore, we do not continue to evaluate the performance of the value weighted portfolios.

⁶ The addition of market returns does not affect the performance of any good–bad strategy and is merely done to normalize the returns for the performance regressions conducted in this study.

⁷ As a robustness check, we also considered the 1999–2004 and 2001–2004 samples, but we do not report these results because they are in line with the presented results. In addition, we also consider whether performance is driven by Keiretsu membership or by firms with ADRs listed in the United States. Both Keiretsu membership and cross-listings do not affect our overall conclusion. We thank the referee for pointing these issues out to us.

are shown to affect the performance of a firm (Fama and French, 1992, 1993). In addition, momentum or past performance is found to be another possible factor (Carhart, 1997). To determine whether well-governed firms outperform poorly governed firms, we need to correct for these factors; therefore, we estimate the following time series regression for the zero-investment portfolios:

$$R_{Gt} - R_{Bt} = \alpha + \beta_1(R_{mt} - r_{ft}) + \beta_2\text{SMB}_t + \beta_3\text{HML}_t + \beta_4\text{MOM}_t + \varepsilon_t, \quad (1)$$

where R_{Gt} is the return of the well-governed portfolio in month t , and R_{Bt} is the return of the poorly governed portfolio. The market return is measured by R_{mt} , and the risk-free rate is measured by r_{ft} . The size effect is measured by SMB_t (a zero-investment portfolio of small minus big firms); the book-to-market effect is measured by HML_t (a zero-investment portfolio of high minus low book-to-market firms); and the momentum effect is measured by MOM_t (a zero-investment portfolio of high past performance firms minus low past performance firms). The constant term (α) measures the out- or underperformance of the good–bad portfolios corrected for the factors in the model.

The data used to construct the four factors described above are obtained from Worldscope. For the excess market return, we select all stocks in Worldscope Japan minus the Japanese 3-month Tibor rate. SMB is the difference in return between a small portfolio (smallest 20%) and a large portfolio (the remaining stocks). For the HML factor, all stocks are ranked according to book-to-market ratios. Following Fama and French (1992), we assign the top 30% of market capitalization to the high book-to-market portfolio and the bottom 30% to the low book-to-market portfolio and construct HML by subtracting the low from the high book-to-market returns. The momentum factor portfolio is formed by ranking all stocks according to their prior 12-month returns. The return difference between the top 30% and bottom 30% rated according to market capitalization provides us with MOM, the momentum factor returns. This procedure is repeated every month to produce a rolling momentum factor.

We estimate Eq. (1) and compute monthly α 's (stated in percentages) for the period January 2000 to December 2004 for the 20% and 5% cut-off points. We further estimate Eq. (1) for the 20% cut-off point using the sector correction and for the 20% cut-off point for the period January 2001 to December 2004. All models are estimated for a long–short strategy and for the individual portfolios (in this case, the dependent variable in Eq. (1) is substituted by the excess return of the well-governed and poorly governed portfolios [i.e., $R_{Gt} - r_{ft}$ and $R_{Bt} - r_{ft}$, respectively]).

In Table 6, we present the results for Eq. (1). The first rows in Table 6 present the results for the 20% cut-off point for the good–bad portfolio. We find that well-governed firms significantly outperform poorly governed firms at the 5% level, with a monthly outperformance (α) of 0.86%, or 10.32% a year. These findings are in line with the findings of Gompers et al. (2003) and Drobetz et al. (2004), who find that well-governed firms outperform poorly governed firms by 8.52% (United States) and 16.44% (Germany) a year, respectively. The estimates of the model reveal some further features related to the outperformance of the good–bad strategy. First, when comparing α of the zero-investment strategy with the α 's for the separate portfolios, we find that the outperformance of the good–bad strategy is attributable to the underperformance of poorly governed firms. The portfolio consisting of poorly governed firms has a significant underperformance (at the 1% level). Although α is positive for well-governed firms, it is far from significant. Second, we find a significantly negative relationship between the good–bad strategy and the SMB factor. We find a negative but insignificant coefficient for the portfolio of well-governed firms and a positive significant coefficient for poorly governed firms, indicating that poorly governed firms tend to be smaller. Similar effects are found for the HML factor. Poorly governed firms have higher book-to-

Table 6
Performance attribution regressions

	α	RMRF	SMB	HML	MOM	R^2 (adj)
<i>Equally weighted (20% cut-off)</i>						
Good–bad	0.86** (2.58)	–0.05 (–0.99)	–0.37*** (–2.85)	–0.11** (–2.63)	–0.06 (–1.26)	36.68
Good	0.18 (0.63)	1.07*** (18.62)	–0.13 (–1.07)	0.15*** (2.96)	–0.14*** (–3.23)	87.63
Bad	–0.69*** (–3.40)	1.12*** (24.16)	0.25*** (2.69)	0.26*** (5.37)	–0.09*** (–3.03)	91.93
<i>Equally weighted (5% cut-off)</i>						
Good–bad	1.26** (2.04)	–0.08 (–0.63)	–0.63*** (–2.94)	0.06 (0.54)	–0.17** (–2.15)	22.75
Good	0.48 (1.24)	1.13*** (12.89)	–0.27** (–2.06)	0.22*** (2.91)	–0.16** (–2.45)	77.16
Bad	–0.78 (–1.62)	1.21*** (10.70)	0.36** (2.17)	0.16* (1.79)	0.01 (0.21)	77.66
<i>Equally weighted sector adjusted (20% cut-off)</i>						
Good–bad	0.76** (2.45)	–0.03 (–0.74)	–0.32** (–2.36)	–0.01 (–0.37)	–0.02 (–0.55)	20.83
Good	0.12 (0.47)	1.04*** (19.68)	–0.09 (–0.85)	0.22*** (5.20)	–0.12*** (–3.20)	89.02
Bad	–0.64*** (–3.22)	1.08*** (24.20)	0.23*** (2.79)	0.24*** (5.02)	–0.10*** (–3.19)	91.76
<i>Sample 2001–2004 equally weighted (20% cut-off)</i>						
Good–bad	1.13*** (3.40)	–0.06 (–1.38)	–0.58*** (–4.29)	–0.15*** (–2.96)	0.04 (0.75)	53.11
Good	0.28 (1.04)	1.09*** (17.53)	–0.40*** (–4.72)	0.14** (2.52)	–0.01 (–0.16)	91.76
Bad	–0.86*** (–3.73)	1.15*** (21.59)	0.19* (1.73)	0.29*** (4.39)	–0.05 (–0.92)	92.41

This table presents results for the performance attribution regression (1). Portfolios are constructed equally weighted using different cut-off points with or without sector corrections. The sample period ranges from 2000–2004, except for the last rows where the sample is shortened to 2001–2004. Results are reported for portfolios with 20% and 5% cut-off points. Additionally, we report results for a sector-adjusted portfolio at a 20% cut-off point. Results are reported for good–bad, good and bad portfolios. Alphas are monthly and stated in percentages. RMRF refers to the coefficient for the market risk of the portfolio, SMB to the coefficient on the size factor, HML to the coefficient on the book-to-market value factor and MOM to the coefficient on the momentum factor. All coefficients are reported with Newey–West corrected *t*-statistics in parentheses. Significance is indicated by *, **, and *** for the 10%, 5% and 1% level respectively.

market values than well-governed firms. The importance of these factors in the zero-investment strategy is highlighted by the R^2 (adj) reported in the last column, which indicates that 36.7% of the performance of this strategy can be explained by these factors.

To explore whether the results presented above are an artifact of the chosen cut-off point, we select a 5% cut-off point as a robustness check for our results. We report these results in the next rows of Table 6. We find that the outperformance of good firms at the 5% cut-off point is even higher than the outperformance based on the 20% cut-off point, with a monthly α of 1.26%, or 15.12% a year, and significant at the 5% level. Similar to the 20% cut-off point, we find that the portfolio of good firms has a positive α , and the bottom portfolio has a negative α (both are

insignificant). In addition, the size effect remains present, and we now observe a (negative) momentum effect. Although of lesser importance, these factors explain 22.8% of the performance of the zero-investment strategy.

Next, we explore whether sector effects have an influence on the performance of the good and bad governance portfolios in Eq. (1). We report results for the 20% cut-off point. Similar to the results reported above, we find that sector effects have a small impact on the outperformance of the good–bad portfolio. The results do not deviate substantially from the results for the portfolios without sector correction, except that the HML effect has disappeared. This indicates that HML is a sector effect. (Bauer et al., 2004 found a similar effect for European countries.) The explanatory power of the good–bad regression drops to 20.8%.

Finally, we consider a shorter sample period. Outperformance was found to be present in all sample periods (see Table 5), which might indicate that most of the outperformance is found closer to the date when the rating was conducted. The results for the 20% cut-off point are reported in the last rows of Table 6. In line with our expectation, we find a higher and more significant outperformance of the good–bad portfolio. The α is significant at the 1% level and indicates that well-governed firms outperform poorly governed firms by 1.13% a month, or 13.56% a year. Again, we find strong size and book-to-market effects.

4. Governance categories and corporate performance

Previous research (Bebchuk et al., 2004) indicates that not all governance provisions affect stock price performance. Therefore, we investigate the effects of the six separate governance categories on corporate performance provided by GMI: (1) board accountability, (2) financial disclosure and internal controls, (3) shareholder rights, (4) remuneration, (5) market for control, and (6) corporate behavior. We first determine which categories we expect to affect stock price performance in Japan and subsequently report our findings.

Past research that focused on board accountability has produced mixed results for Japan. In particular, the importance of independent directors is highly disputed. For most Japanese firms, the board is dominated by inside directors. For example, Ballon and Tomita (1988) and Kaplan (1994) show that 43.5% and 41.2% of firms, respectively, have no independent directors. Kang and Shivdasani (1995) find no relationship between having independent directors and firm performance; however, Kaplan and Minton (1994) find that poor corporate performance is associated with the appointment of an outside director. Other features, such as the frequency of board elections and the extent to which the board operates in shareholders' interests, are not expected to affect corporate performance. As a result of the large amount of cross-holdings of Japanese firms and the dominant role of a main bank, it is mainly those parties that elect board members.⁸ In addition, as noted by Kang and Shivdasani (1995), equity ownership by management is small. When management is directed to operate in the interest of shareholders, it is likely to operate in the interest of the main shareholder, which is the main bank. Given this evidence, we expect that the presence of independent directors on a board will have some impact on corporate performance, but we remain indifferent about the effect of a board operating in shareholder interests on corporate performance. We, therefore, expect only a marginally positive relationship between board accountability and performance.

We expect a strong relationship between the financial disclosure and internal controls category and performance. The quality and amount of financial disclosure is probably the most important

⁸ Kato and Kubo (2006) describe the annual shareholder meeting for Japanese firms as a mere formality.

piece of information shareholders receive, and its importance is highlighted by recent accounting scandals (e.g., Enron, Ahold, and Kanebo).

Similar to the financial disclosure category, we expect the shareholder rights category to be related to stock price performance because these rights directly affect shareholders' wealth. The importance of this category, however, may be mitigated by some factors: First, given that most of the shares of a firm are held by a few large shareholders, shareholder rights may not be used in the interest of minority shareholders; and second, we do not expect provisions that deal with confidential and cumulative voting to affect shareholder value because most large shareholders are stable shareholders, who should be familiar with each other. We, therefore, expect a positive relationship between shareholder rights and corporate performance, but its importance remains questionable.

Based on past research (e.g., [Morck et al., 2000](#)), we expect remuneration to affect corporate performance: First, because remuneration is directly related to the amount of funds that is distributable to shareholders, we expect a strong relationship between remuneration and corporate performance; second, the concept of aligning managers' interests with shareholder interests through financial incentives is rather new in Japan and not widely adopted. Firms that do have stock options may be valued higher (see [Ahmadjian, 2000](#)); third, as noted by [Ahmadjian \(2000\)](#), disclosure of remuneration is not common in Japan, and the amount of remuneration is often determined internally; and fourth, as argued by [Morck et al. \(2000\)](#), firm value in Japan increases monotonically with managerial equity ownership because managerial ownership brings the objectives of shareholders and managers in line with each other. Unlike the United States, however, where large managerial ownership has been used as a takeover defense and impacted firm value negatively (see [Stulz, 1988](#)), takeovers are rare in Japan, and the decrease in firm value should not be observed.

Given the corporate history of Japan, we expect no or even a negative relationship between corporate performance and the market for control category. As a result of the large cross-shareholdings, takeovers are rare in Japan; therefore, any additional defense mechanisms would be of no use and costly.

Finally, we expect a positive relationship between corporate behavior and corporate performance because recent evidence shows the positive relationship between the social behavior of firms and their performance (see [Derwall et al., 2005](#)).

For each category, we create zero-investment portfolios (i.e., long in a portfolio of well-governed firms and short in a portfolio of poorly governed firms) for several cut-off points. Subsequently, we adjust the performance of these portfolios by applying the [Fama and French \(1992, 1993\)](#) and [Carhart \(1997\)](#) regression framework discussed in Eq. (1).

In [Table 7](#), we present the results for the good–bad investment strategy for all six governance categories. As reported above, the overall rating leads to a significant outperformance (also for the home overall rating). For the other categories, the results are mixed. We find no significant outperformance for board accountability, market for control, and corporate behavior (the results for market for control even indicate an underperformance). The other three categories result in significant outperformances. The level of significance, however, differs for each category and for the global and home rating. Interestingly, for all the categories where we find outperformance, we also observe a size effect.

The above reported results may once again depend on the sample period and cut-off point; therefore, we estimate Eq. (1) for all categories, varying the sample period from 1999–2004 to 2001–2004. We further evaluate several cut-off points, which range from 30% to 5%. To further assess the outperformance, all portfolios are constructed using sector-adjusted returns.

Table 7

Category results: performance regressions

	α	RMRF	SMB	HML	MOM	R^2 (adj)
<i>Global</i>						
Overall	0.86** (2.58)	−0.05 (−0.99)	−0.37*** (−2.85)	−0.11** (−2.63)	−0.06 (−1.26)	36.68
Board accountability	0.01 (0.05)	0.12** (2.10)	−0.02 (−0.17)	0.06 (0.59)	−0.03 (−0.62)	0.55
Financial disclosure and internal control	0.71* (1.73)	−0.04 (−0.53)	−0.39*** (−2.87)	−0.22*** (−3.85)	−0.11** (−2.25)	38.26
Shareholder rights	0.34* (1.93)	0.09** (2.31)	−0.27** (−2.13)	0.01 (0.19)	−0.07*** (−2.69)	18.32
Remuneration	0.72*** (3.21)	−0.05 (−0.68)	−0.17** (−2.48)	−0.10 (−1.14)	−0.06 (−1.27)	16.91
Market for control	−0.05 (−0.21)	−0.06 (−0.98)	0.20 (1.55)	0.04 (0.52)	−0.01 (−0.17)	9.64
Corporate behavior	0.40 (1.27)	−0.03 (−0.52)	−0.15 (−1.14)	−0.08 (−1.16)	−0.10** (−2.07)	5.67
<i>Home</i>						
Overall	0.66** (2.31)	0.08 (1.28)	−0.20 (−1.19)	−0.10 (−1.58)	−0.11** (−2.49)	17.60
Board accountability	0.10 (0.46)	0.12* (1.94)	0.11 (0.76)	−0.06 (−0.51)	−0.06* (−1.82)	6.76
Financial disclosure and internal control	0.59* (1.90)	−0.00 (−0.02)	−0.33*** (−2.74)	−0.21*** (−3.60)	−0.13*** (−3.02)	41.39
Shareholder rights	0.40*** (2.79)	0.11*** (2.75)	−0.39*** (−3.72)	0.04 (0.57)	−0.05 (−1.56)	38.05
Remuneration	0.36* (1.84)	0.05 (1.00)	−0.18** (−2.33)	−0.08 (−1.45)	−0.01 (−0.26)	23.17
Market for control	−0.18 (−0.81)	−0.09 (−1.23)	0.11 (0.81)	0.19** (2.21)	0.08 (1.37)	26.66
Corporate behavior	0.37 (1.14)	−0.13* (−1.89)	0.01 (0.06)	−0.12 (−1.56)	−0.11** (−2.37)	7.61

This table presents results for the performance regressions for all separate governance categories. Portfolios are equally weighted using a 20% cut-off point without sector adjustments. The sample period ranges from 2000–2004. Results are reported for the good–bad portfolios. Alphas are monthly and stated in percentages. RMRF refers to the coefficient for the market risk of the portfolio, SMB to the coefficient on the size factor, HML to the coefficient on the book-to-market value factor and MOM to the coefficient on the momentum factor. All coefficients are reported with Newey–West corrected *t*-statistics in parentheses. Significance is indicated by *, **, and *** for the 10%, 5% and 1% level respectively.

In Table 8, we present an overview of the regression results for the performance of equally weighted portfolios constructed according to different ratings. In Table 8, we use a + sign when α of the respective zero-investment portfolio is significantly positive at the 5% level. A 0 is used if α does not differ significantly from zero.⁹ Each column represents the cut-off points for the portfolios, and the rows relate to the criteria used to form the portfolios. Each element in Table 8 contains three entries: The first entry refers to the significance of α over the 1999–2004 sample

⁹ No – sign is reported, which indicates that no significantly negative values for α were found.

Table 8

Significant outperformance of top-bottom portfolio at 5% level over three sample periods [1999–2004, 2000–2004, 2001–2004]

	30%	25%	20%	15%	10%	5%	Total
<i>Global</i>							
Overall rating	+,0,+	+,0,+	+,+,+	+,+,+	+,+,+	0,+,+	15+
Board accountability	0,0,0	0,0,0	0,0,0	0,0,0	0,0,0	0,0,0	0
Financial disclosure and internal control	0,0,+	0,0,+	0,0,+	0,+,+	0,+,+	0,0,+	8+
Shareholder rights	0,+,+	0,0,0	0,0,0	0,0,0	0,0,0	+,0,0	3+
Remuneration	+,+,+	+,+,+	+,+,+	+,+,+	+,+,+	+,+,+	18+
Market for control	0,0,0	0,0,0	0,0,0	0,0,0	0,0,0	+,0,+	2+
Corporate behavior	0,0,0	0,0,0	0,0,0	0,0,0	0,+,0	0,0,0	1+
<i>Home</i>							
Home overall rating	+,+,+	0,+,+	0,+,+	+,+,+	0,+,+	0,+,+	15+
Home board accountability	0,0,0	0,0,0	0,0,0	0,0,0	0,0,0	0,0,0	0
home financial disclosure and internal control	0,0,+	0,0,+	0,0,+	+,+,+	+,+,+	0,0,0	9+
Home shareholder rights	0,+,+	0,+,+	0,+,+	0,0,0	0,0,0	0,0,0	6+
Home remuneration	+,0,+	+,0,+	+,0,+	+,+,+	+,+,+	+,+,+	15+
Home market for control	0,0,0	0,0,0	0,0,0	0,0,0	0,0,0	0,0,+	1+
Home corporate behavior	0,0,0	0,0,0	0,0,0	0,0,0	0,0,+	0,+,+	3+

This table reports the number of instances in which α of a zero-investment strategy long in a portfolio with a high rating in a particular category and short in a portfolio with a low rating is significant at the 5% level. Regressions are performed for sector adjusted equally weighted portfolios. Portfolios are constructed based on different cut-off points, which are the labels of each column. Each entry in the table contains three elements, the first element indicates whether α is significant for the sample period January 1999–December 2004, the second element indicates whether α is significant for the period January 2000–December 2004 and the last element indicates significance for the period January 2001–December 2004. A ‘+’ refers to an α that is significantly positive, a ‘0’ to insignificance and a ‘–’ to an α that is significantly negative.

period; the second entry refers to the significance of α over the 2000–2004 period; and the last entry refers to the significance of α over the 2001–2004 period.

In line with results shown in Table 7, we find that good-governance firms outperform poor-governance firms when ranked on the global overall rating. Significance for both global and home rating is found in 15 out of 18 cases. Therefore, the outperformance of well-governed firms based on the overall rating is robust for all the sample periods and cut-off points.

When evaluating the separate categories, several conclusions can be drawn. Supporting earlier observations, board accountability, market for control, and corporate behavior do not affect performance. We find that the remuneration criterion definitely matters for shareholders, which confirms the findings of Kato and Kubo (2006). The second-most important category is financial disclosure and internal controls, which especially affects performance in the home market. Finally, shareholder rights also affect performance, but to a lesser extent.

5. Conclusion

In this article, we investigate the relationship between corporate governance and corporate performance in Japan. We use a unique governance index that rates firm’s corporate governance using six different categories. These categories are combined in a single overall index. Using the global overall index to construct portfolios of well-governed and poorly governed firms, we find that well-governed firms significantly outperform poorly governed firms by up to 15% a year,

even after correcting for market risk and size and book-to-market effect. The results are robust over different sample periods, cut-off points, and sector corrections.

The corporate governance index is constructed from six sub-indices; therefore, we can further investigate the relationship of each sub-index with stock price performance. We observe that provisions that deal with financial disclosure and internal control, shareholder rights, and remuneration have a significant impact on stock performance. Provisions that deal with board accountability, market for control, and corporate behavior do not affect stock performance. These findings provide evidence that not all aspects of corporate governance matter to shareholders in Japan.

Appendix A

This Appendix provides a brief overview of the six governance categories: (1) board accountability, (2) financial disclosure and internal controls, (3) shareholder rights, (4) remuneration, (5) market for control, and (6) corporate behavior.

A.1. Board accountability

Within the Board Accountability category, the board of a firm is analyzed on the basis of its power and its motivation to work in the shareholders' best interest. The criteria that influence board accountability include the number of independent directors on the board, the frequency at which shareholders can elect the board, and the extent to which board members operate in the interest of shareholders. This last criterion is based on whether board members hold shares in the firms and the extent to which the board responds to shareholder demands.

A.2. Financial disclosure and internal controls

The financial disclosure and internal controls category includes criteria such as the extent to which the board is independently audited, the firm's acceptance of widely used accounting standards, and the extent to which the firm manipulates earnings through its accounting practices. Disclosure is measured by the quality of financial reports, discussions with shareholders, and analyses the firm provides to shareholders.

A.3. Shareholder rights

The shareholder rights category measures the extent to which shareholder rights are protected by the firm and the extent to which shareholders can execute their power. It includes criteria such as the extent to which the regulatory system of the firm is designed to protect shareholder rights, the effort the firm makes to allow shareholders to attend shareholder meetings, and the voting power and rights of each shareholder. It also includes whether the firm provides and allows confidential and cumulative voting.

A.4. Remuneration

The remuneration category measures whether a firm has an independent remuneration committee. It focuses on the extent to which remuneration policies are made transparent to the shareholders of the firm and whether remuneration is equity based.

A.5. Market for control

The market for control category focuses on two main issues: First, it considers the takeover defenses that a firm employs and measures the extent to which management restricts shareholders' decisions about these measures; and second, it measures the extent to which shareholders can determine who will be on the board of directors.

A.6. Corporate behavior

The corporate behavior category measures the extent to which the firm lives up to its responsibilities towards other stakeholders in the firm, such as their employees. It also considers whether the firm acts in an environmentally responsible way and whether it is concerned with maintaining a good reputation.

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